

### Amendments to the Specification

Please replace the paragraph beginning at page 12, line 1, with the following rewritten paragraph:

Figure 6 illustrates a block diagram which describes, in one embodiment, the process of calculating estimates for  $\mu$  and  $\sigma$ . This process can be performed as the process of blocks 512 and 514 of Figure 5. ~~Ristea and Maness, 2001, demonstrates that this~~ This process is equivalent to performing the calculations given above in (3) and (4). The illustrated embodiment assumes that the known good data set comprises  $m$  samples with each sample comprising  $n$  moisture content measurements. In a preferred embodiment,  $m$  is at least 20, while  $n$  is 5 or greater. At block 602, each sample  $x_1, x_2, \dots, x_n$  is transformed to normality by first subtracting the estimated threshold parameter and then taking the natural logarithm, giving a normalized sample  $y_1, y_2, \dots, y_n$  by the equation: